IN THE CLAIMS

Complete listing of the claims:

1. (Currently Amended) An ink jet recording apparatus comprising:

a serial type recording head which has a plurality of ink jet openings for jetting photo-curable ink toward a recording medium, the ink jet openings being arranged in one or more lines; and

an irradiation section which is provided adjacent to the recording head in a scanning direction of the recording head, for irradiating an ink jetted on the recording medium with light, the irradiation section having a plurality of irradiation elements which correspond to the ink jet openings, respectively, and which are arranged in one or more lines in approximately parallel with an arrangement direction of the plurality of ink jet openings, and an irradiation controller for controlling the irradiation elements to light at least an irradiation element which corresponds to an ink jet opening which jetted the ink, and not to light an irradiation element which corresponds to an ink jet opening which did not jet the ink, in the plurality of irradiation elements.

2. (Original) The ink jet recording apparatus of claim 1, further comprising an ink jet controller for controlling an amount of the ink jetted from the ink jet opening, the irradiation controller changing an amount of irradiating light to the recording medium from the irradiation element which corresponds to the ink jet opening, depending upon an amount of the ink jetted by the ink jet opening.

3. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation element is provided as many as the ink jet opening.

4. (Original) The ink jet recording apparatus of claim 1, wherein the number of the irradiation elements is less than the number of the ink jet openings, an irradiation element is provided corresponding to an ink jet opening group which comprises at least an ink jet

opening, and the irradiation controller changes an amount of irradiating light to the recording medium from the irradiation element which corresponds to the ink jet opening group, depending upon an amount of the ink jetted from the ink jet opening group.

5. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation element comprises one end of an optical cable, another end of which being connected to a light source.

6. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation element irradiates the ink jetted on the recording medium with light as an approximately parallel pencil.

7. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation element irradiates the ink jetted on the recording medium with light as one of a convergent light or a diffuse light.

8. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation section further comprises a lens for approximately equalizing a size of an irradiated portion of the recording medium with a size of a dot formed by the ink on the recording medium, by refracting light radiated from the irradiation element.

9. (Original) The ink jet recording apparatus of claim 4, wherein the irradiation section further comprises a lens for approximately equalizing a size of an irradiated portion of the recording medium with a size of an ink jetted region of the ink jetted from the jet opening group by refracting light radiated from the irradiation element.

10. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation section further comprises a lens for approximately equalizing a diameter of an irradiated portion of the recording medium in the arrangement direction with a dot diameter formed by

the ink on the recording medium by refracting light radiated from the irradiation element.

11. (Original) The ink jet recording apparatus of claim 4, wherein the irradiation section further comprises a lens for approximately equalizing a diameter of an irradiated portion of the recording medium in the arrangement direction with a size of an ink jetted region of the ink jetted from the jet opening group in the arrangement direction, by refracting light radiated from the irradiation element.

12. (Original) The ink jet recording apparatus of claim 1, wherein a plurality of recording heads are provided.

13. (Original) The ink jet recording apparatus of claim 1, wherein an image is recorded on the recording medium.

14. (Original) The ink jet recording apparatus of claim 1, wherein the irradiation element is at least any one of a solid-state laser, a gas laser, a liquid laser, a free electron laser, an X-ray laser, a fluorescent tube, a light emitting diode and an electron beam irradiation device.

15. (Original) The ink jet recording apparatus of claim 1, wherein the ink jet opening jets an ultraviolet curable ink, and the irradiation element radiates an ultraviolet-ray.

16. (Original) The ink jet recording apparatus of claim 15, wherein the ink jet opening jets a cationic polymerization ink.

17. (Currently Amended) An ink jet recording apparatus comprising:

a line type recording head which has a plurality of ink jet openings for jetting photo-curable ink toward a recording medium, the ink jet openings being arranged in one or more lines; and

an irradiation section which is provided adjacent to the recording head in a carrying direction of the recording medium, for irradiating an ink jetted on the recording medium with light, the irradiation section having a plurality of irradiation elements which correspond to the ink jet openings, respectively, and which are arranged in one or more lines in approximately parallel with an arrangement direction of the plurality of ink jet openings, and an irradiation controller for controlling the irradiation elements to light at least an irradiation element which corresponds to an ink jet opening which jetted the ink, and not to light an irradiation element which corresponds to an ink jet opening which did not jet the ink, in the plurality of irradiation elements.

18. (Original) The ink jet recording apparatus of claim 17, further comprising an ink jet controller for controlling an amount of the ink jetted from the ink jet opening, the irradiation controller changing an amount of irradiating light to the recording medium from the irradiation element which corresponds to the ink jet opening, depending upon an amount of the ink jetted by the ink jet opening.

19. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation element is provided as many as the ink jet opening.

20. (Original) The ink jet recording apparatus of claim 17, wherein the number of the irradiation elements is less than the number of the ink jet openings, an irradiation element is provided corresponding to an ink jet opening group which comprises at least an ink jet opening, and the irradiation controller changes an amount of irradiating light to the recording medium from the irradiation element which corresponds to the ink jet opening group, depending upon an amount of the ink jetted from the ink jet opening group.

21. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation element comprises one end of an optical cable, another end of which being connected to a light source.

22. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation element irradiates the ink jetted on the recording medium with light as an approximately parallel pencil.

23. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation element irradiates the ink jetted on the recording medium with light as one of a convergent light or a diffuse light.

24. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation section further comprises a lens for approximately equalizing a size of an irradiated portion of the recording medium with a size of a dot formed by the ink on the recording medium, by refracting light radiated from the irradiation element.

25. (Original) The ink jet recording apparatus of claim 20, wherein the irradiation section further comprises a lens for approximately equalizing a size of an irradiated portion of the recording medium with a size of an ink jetted region of the ink jetted from the jet opening group by refracting light radiated from the irradiation element.

26. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation section further comprises a lens for approximately equalizing a diameter of an irradiated portion of the recording medium in the arrangement direction with a dot diameter formed by the ink on the recording medium by refracting light radiated from the irradiation element.

27. (Original) The ink jet recording apparatus of claim 20, wherein the irradiation section further comprises a lens for approximately equalizing a diameter of an irradiated portion of the recording medium in the arrangement direction with a size of an ink jetted region of the ink jetted from the jet opening group in the arrangement direction, by refracting light radiated from the irradiation element.

28. (Original) The ink jet recording apparatus of claim 17, wherein a plurality of recording heads are provided.

29. (Original) The ink jet recording apparatus of claim 17, wherein an image is recorded on the recording medium.

30. (Original) The ink jet recording apparatus of claim 17, wherein the irradiation element is at least any one of a solid-state laser, a gas laser, a liquid laser, a free electron laser, an X-ray laser, a fluorescent tube, a light emitting diode and an electron beam irradiation device.

31. (Original) The ink jet recording apparatus of claim 17, wherein the ink jet opening jets an ultraviolet curable ink, and the irradiation element radiates an ultraviolet-ray.

32. (Original) The ink jet recording apparatus of claim 31, wherein the ink jet opening jets a cationic polymerization ink.